

REMARKS

The Office Action of July 12, 2006 has been carefully considered.

Objection has been raised to claim 11 as being inconsistent with claim 1, and the inconsistent recitation of claim 11 has been deleted; the req of claim 11 is now the same as that of claim 1. As this amendment does not add any subject matter requiring further consideration or search, and simplifies issues for appeal, entry of this amendment after final rejection is submitted to be proper.

Claims 31-33 have been added to the application. Claim 31 (second step maximum temperature of 150°C) is supported by Tables 1 and 2, and the Cu value of 1.96% in claim 32 and the Zn value of 8.38% in claim 33 are supported by Example 2.

Claims 1-7, 9-10 and 25-30 have been rejected under 35 USC 103(a) over Ponchel et al.

It has been demonstrated previously with the Dixon test for extreme values that the value of 94.1 for Example 6 in Table III of Ponchel et al is an error. Since this value was incorporated in Figure 3 of Ponchel et al, it is demonstrated herein that Figure 3 of Ponchel presents the average values of longitudinal compressive strength for the different samples in Tables I, II and III.

The Table below summarizes the values provided in Ponchel and an average value was calculated.

	Compressive Yield Strength (ksi) from Ponchel			
	Table I	Table II	Table III	Average
Control 1	87,2	88,1	88,7	87,7
Control 2	86,8	88,9	89,4	87,9
1	82,4	82,8	85,4	82,6
2	83,8	82,8	87,7	83,3
3	82,7	82,6	87,5	82,7
4	83,6	82	88,2	82,8
5	83,3	84,3	88,5	83,8
6	83,6	85,3	94,1	84,5
7	83	86,2	87,5	84,6
8	83,1	83	87,5	83,1
9	83,4	84,5	88,5	84,0
10	84,8	86,4	88,8	85,6
11	85,6	85,7	88,8	85,7

The plot of the average values presented below is identical to Figure 3:

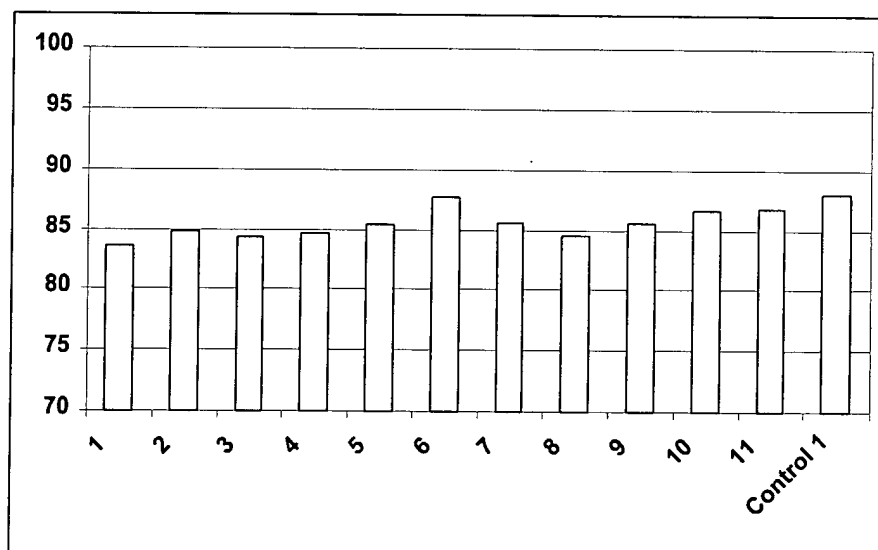
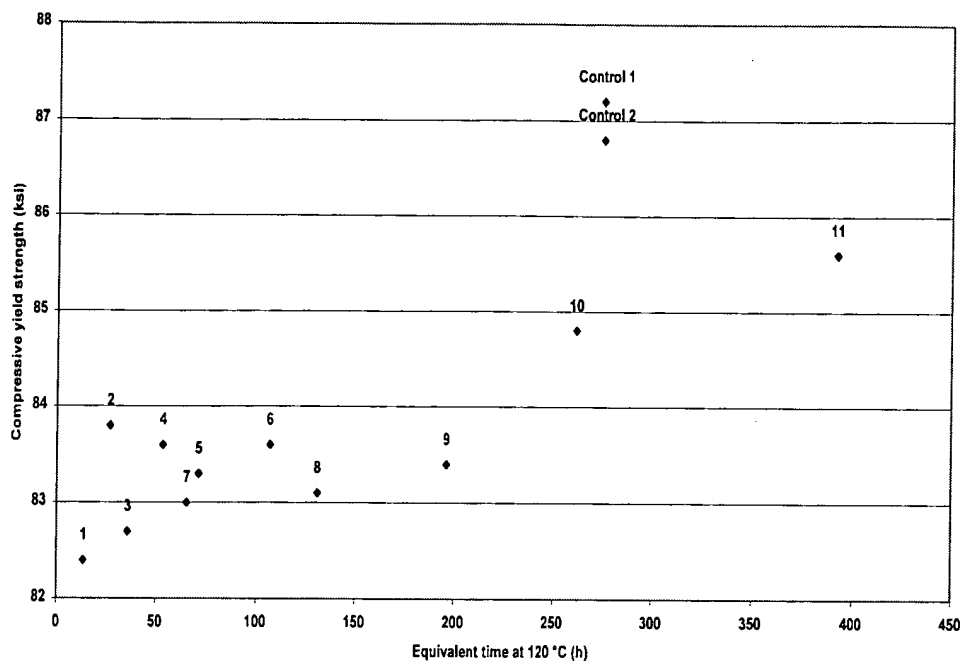


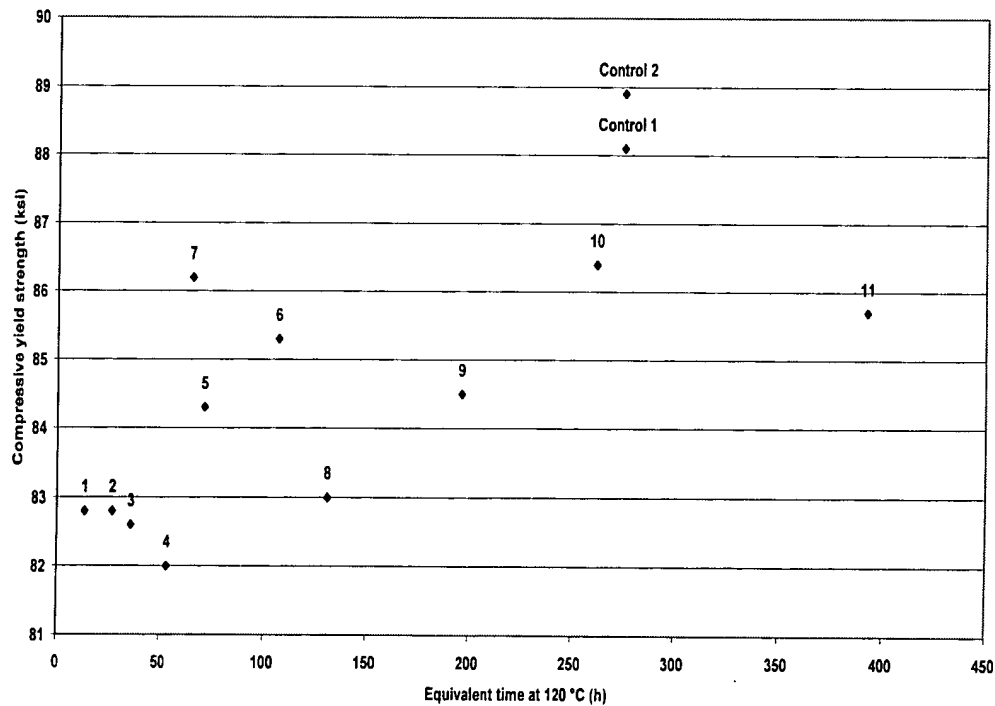
Figure 3 has thus been affected by the error of Table III of Ponchel et al, and cannot be used to demonstrate that Ponchel et al teaches a higher compressive strength for Example 6 with a $t_{eq} = 107$ than for Ex 11 with a $t_{eq} = 390$.

This is further demonstrated with three plots of the compressive yield strength as a function of equivalent time for the data of Table I, Table II and Table III of Ponchel et al.

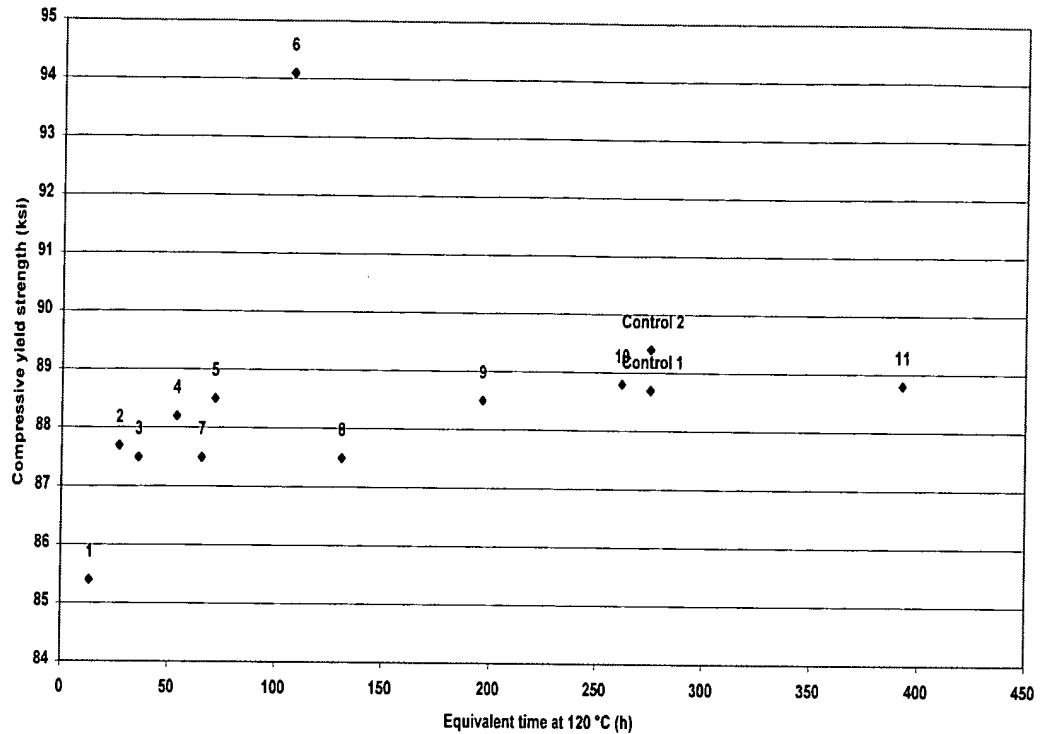
Data from Table I of Ponchel



Data from Table II of Ponchel



Data from Table III of Ponchel



It is submitted that it is not possible from these plots to state that Ponchel teaches that compressive strength is dependent on aging time and temperature, and in particular that an optimum compressive yield strength is obtained for an equivalent time between 100 and 230 hours. To the contrary, to the extent that these plots show a dependency on *teq*, they tend to show that a *higher* equivalent time (samples 10 and 11, with *teq* outside of the claimed invention) provides a higher compressive yield strength. Thus, one of ordinary skill in the art would look to *teq* in excess of 230 hours at 120°C to optimize compressive yield strength.

Withdrawal of this rejection is requested.

Claims 1-7, 9-11 and 25-30 have been rejected under 35 USC 103(a) over Hunt, Jr.

Hunt, Jr. teaches a two step aging with a very wide range of equivalent times. Indeed, the minimum aging time is 2h at 175°F + 5h at 300°F, a *teq* of 82 hours at 120°C, and the

maximum aging time is 30h at 285°F + 18h at 350°F, a teq of 3084 hours at 120°C. There is nothing in Hunt, Jr. that would lead one of ordinary skill in the art to the narrow claimed range (100h to 250h) or the invention which achieves unexpected results.

The examples in Table 3 of Hunt, Jr., which are cited in the Office Action, do not suggest the invention. Although the teq values cited in the Office Action are between 146 and 230 hours, these examples are not relevant because they refer to three step aging treatments. Column 10, lines 54-56 of Hunt, Jr. states "[t]he third aging stage was not given a separate column in Table 3 as it was consistently 24 hours at 250°F."

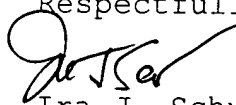
Thus, Hunt does not teach a maximized compression yield strength for a one step or two step aging.

It should also be noted that none of the examples taught by Hunt, Jr. in Table III are within the composition limits for AA7349 or AA7449 alloys, as recited in claim 5, and that new claim 32 is limited to alloys with a Cu range of 1.2 - 1.95 wt.%, whereas Hunt teaches alloys with Cu range from 2 to 2.6 wt%. Claims 5 and 32 are thus clearly distinguished from Hunt, Jr.

Withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicant submits that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,


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